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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/595,599	06/15/2000	Gaurav Banga	103.1043.01	2034

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EXAMINER	
YAO, KWANG BIN	

ART UNIT	PAPER NUMBER
2667	7

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/595,599	BANGA ET AL.	
	Examiner	Art Unit	
	Kwang B. Yao	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 April 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Wager et al. (US 6,519,23).

The admitted prior art discloses a communication system comprising the following features: as described on pages 1-5 of the present application, regarding claim 11, reducing a likelihood of misassembly of data fragments from fragmented IP datagrams, receiving data fragments of a datagram having an IP identification number; regarding claim 14, wherein the steps are performed by an IP layer of a receiving station's communication system. The admitted prior art does not disclose the following features: regarding claim 11, discarding all received data fragments of the datagram upon detection of receipt of an overlapping data fragment having the IP identification number, wherein the overlapping data fragment overlaps data in an already-received data fragment; regarding claim 12, wherein the overlapping data fragment overlaps all of the already-received data fragment; regarding claim 13, wherein the overlapping data fragment overlaps less than all of the already-received data fragment. Wager et al. discloses a telecommunication system comprising the following features: as depicted in Figs. 3, 4, 5, regarding claim 11, discarding all received data fragments (PDU 220) of the datagram (SDU

210) upon detection of receipt of an overlapping data fragment having the IP identification number, wherein the overlapping data fragment (PDU 220) overlaps data in an already-received data fragment; regarding claim 12, wherein the overlapping data fragment overlaps all of the already-received data fragment; regarding claim 13, wherein the overlapping data fragment overlaps less than all of the already-received data fragment. See column 5, line 18 to column 7, line 54. It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify the system of the admitted prior art, by using the features, as taught by Wager et al., in order to provide a more reliable transmission system. See Wager et al., column 2, lines 12-36.

3. Claims 15-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Miller et al. (US 6,247,058).

The admitted prior art discloses a communication system comprising the following features: as described on pages 1-5 of the present application, regarding claim 15, a method of reducing a likelihood of misassembly of data fragments from fragmented IP datagrams; regarding claim 18, wherein the step is performed by an IP layer of a receiving station's communication system; regarding claim 19, a method of reducing a likelihood of misassembly of data fragments from fragmented IP datagrams, receiving data fragments of a datagram having an IP identification number; regarding claim 21, wherein the steps are performed by an IP layer of a receiving station's communication system; regarding claim 22, reducing a likelihood of misassembly of data fragments from fragmented IP datagrams, comprising the steps o£ receiving data fragments of a first datagram having a protocol identification number, a source address, and a first IP identification number; regarding claim 24, wherein the steps are performed by an IP

layer of a receiving station's communication system. The admitted prior art does not disclose the following features: regarding claim 15, reducing a timeout for reassembling the datagrams to less than a standard timeout; regarding claim 16, wherein the data fragment reassembly timeout is reduced to 45 seconds from the standard timeout of 64 seconds; regarding claim 17, wherein the data fragment assembly timeout is dynamically reduced based on NFS data for round-trip times between a sending station and a receiving station; regarding claim 19, reducing a remaining time for reassembling the datagram upon detection of a gap in the received data fragments; regarding claim 20, wherein the remaining time for reassembling the datagram is reduced to eight seconds; regarding claim 22, reducing a remaining time for reassembling the first datagram upon detection, before receipt of a last data fragment of the first datagram, of a data fragment of a second datagram having the protocol identification number and the source address but having a second IP identification number; regarding claim 23, wherein the remaining time for reassembling the first datagram is reduced to eight seconds. Miller et al. discloses a network system comprising the following features: as described on column 11, line 34 to column 12, line 28, regarding claim 15, reducing a timeout for reassembling the datagrams to less than a standard timeout; regarding claim 17, wherein the data fragment assembly timeout is dynamically reduced based on NFS data for round-trip times between a sending station and a receiving station; regarding claim 19, reducing a remaining time for reassembling the datagram upon detection of a gap in the received data fragments; regarding claim 22, reducing a remaining time for reassembling the first datagram upon detection, before receipt of a last data fragment of the first datagram, of a data fragment of a second datagram having the protocol identification number and the source address but having a second IP identification number; regarding claim 23, wherein the

remaining time for reassembling the first datagram is reduced to eight seconds. Moreover, regarding claims 16 and 20, Miller et al. does not state the specific claimed unit for the timeout, such as 45, 64 and 8 seconds. However, implementing different timeout seconds is design choice and obvious to one of the ordinary skill in the art. Therefore, it would have been obvious to one the ordinary skill in the art at the time of the invention to modify the system the admitted prior art, by using the features, as taught by Miller et al., in order to provide an efficient communication system by conserving network bandwidth. See Miller et al., column 4, lines 58-65.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Miklos (US 6,621,796) discloses a discard mechanism.

Barker et al. (US 5,931,916) discloses a method for retransmitting data packet.

Dudley et al. (US 5,754,754) discloses an error recovery system.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwang B. Yao whose telephone number is 703-308-7583. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H Pham can be reached on 703-305-4378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KWANG BIN YAO
PRIMARY EXAMINER

Kwang B. Yao
July 12, 2004